



COUNTRY	REPORT	25X1
TOPIC Information on the "Andreyev" Metallurgical Plant in Taganrog		
EVALUATION	PLACE OBTAINED	25X1
DATE OF CONTENT		25X1
DATE OBTAINED	DATE PREPARED	26 Nov 1954
REFERENCES		25X1
PAGES 2	ENCLOSURES (NO. & TYPE)	2 - sketches on ditto with legends
REMARKS		
This is UNEVALUATED Information		

1. The "Andreyev" Metallurgical Plant (Taganrogskiy Metallurgicheskiy Zavod im. Andreyeva) was located on the northeastern perimeter of Taganrog (47°14'N lat/38°57'E long), immediately by the Sea of Azov. About 1.5 km north of the plant there was a Mannesmann tube plant and another tube plant which both belonged to the "Andreyev" enterprise. The "Andreyev" Metallurgical Plant was connected with the main railroad line, and many tracks served the factory area. About 10 factory-owned locomotives were available for factory purposes, in particular for the shipment of materials from the steel department of the plant to the tube plant in the north. A streetcar stop was in the vicinity of the factory area.<sup>1</sup> 25X1
2. [redacted] the plant was founded by Belgians in 1907. Between 1935 and 1939, Germans erected the second Siemens-Martin plant, Tube Plant No 2, and the Mannesmann Tube Plant. During World War II, the plant suffered only minor damages. It was, therefore, possible to resume production at the enterprise prior to the end of the war. No construction work was observed prior to early 1950. Only some of the departments of the enterprise were equipped with new machines. 25X1
3. The factory area was approximately 450,000 square meters, of which about 300,000 square meters were accounted for by the main factory. About half of this area was built up. The enterprise included two Siemens-Martin departments, one foundry, one tire department, two sheet mills, two plants for the manufacture of welded tubes, and one Mannesmann tube plant. Power was supplied by the municipal power plant and transformed at the factory. An emergency power generator was also available. [redacted] still in early 1950 the electric current supplied frequently broke down.<sup>2</sup> 25X1
4. Commodities produced at the plant included: 25X1
  - a. Plates, [redacted] armor plates, 10 x 30 mm thick. In late 1949, 80 to 100 plates 10 x 25 mm thick or 40 to 50 plates 30 mm thick were manufactured per shift. It is not clear whether rolling operations were done in all of the three shifts. [redacted] 25X1

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25X1

25X1

- b. Sheets from 1 to 10 mm thick. In late 1949, 300 sheets were manufactured per shift. Data on their dimensions are not available. Likewise no information is available whether rolling operations were done in all of the three shifts.

As of late 1949, 70 to 80 tons of rolled products were manufactured in the two sheet mills in addition to 5 to 10 tons of waste. The sheets were delivered to the tube plants for further processing.

25X1

- c. Tires for locomotives, railroad cars, and streetcars. Two sizes of tires were manufactured, one had a diameter of 90 cm and a weight of 320 kg, the other a diameter of 70 cm and a weight of 260 kg (sic). In late 1949, 320 to 350 tires for locomotives and railroad cars or 500 tires for streetcars were manufactured per shift. However, 20 percent of the output was waste.

- d. Welded tubes, for water pipes. The pipes were manufactured in sections 8 to 10 meters long and had diameters from 0.25 to 6".

in late 1949, 2,000 tubes of all dimensions were completed within a 24-hour period.

25X1

- e. Mannesmann tubing as used by the petroleum industry. The tubes were 15 to 20 meters long and, allegedly, had diameters ranging from 7 to 100 cm. In late 1949, 300 tubes were, allegedly, completed within 24 hours. About 10 percent of the output was waste. The steel required for the plates, sheets, tires, and tubes, was delivered by the two Siemens-Martin plants. No incoming steel deliveries were observed. On the other side,

steel was furnished to other factories in Yaganrog, including the "Stalin" machine factory in the southwestern portion of the town. Sheets were furnished to a boiler factory in the northwestern portion of the city. The pig iron required by the steel foundry was furnished from Dnepropetrovsk (48°27'N lat/34°59'E long) and Stalino (48°00'N lat/37°48'E long), the coal by mines in the Donbas area.

25X1

5. the work force of the plant totaled approximately 10,000 men, the percentage of women employed in the different departments ranging from 33 to 50 percent. Work was done in three shifts. stated that one Astakhov (fnu), was general manager of the plant; mentioned one Tomoravskiy as assistant director, mentioned one Ackermann (fnu) as one of the directors of the enterprise. The factory area was surrounded by a brick wall about 3 meters high and was guarded by armed factory police.

25X1

25X1

25X1

25X1

1. Comment. For location of metallurgical plant, see Annex 1, which is based on concordant information.

The course of the streetcar line could not be determined; the line has, therefore, not been entered on the sketch.

25X1

2. Comment. For layout of the metallurgical plant, see Annex 2; of the foundry, see Annex 3; for layout of the sheet mill and tire plant, see Annex 4; of tube plants 1 and 6, see Annex 5.

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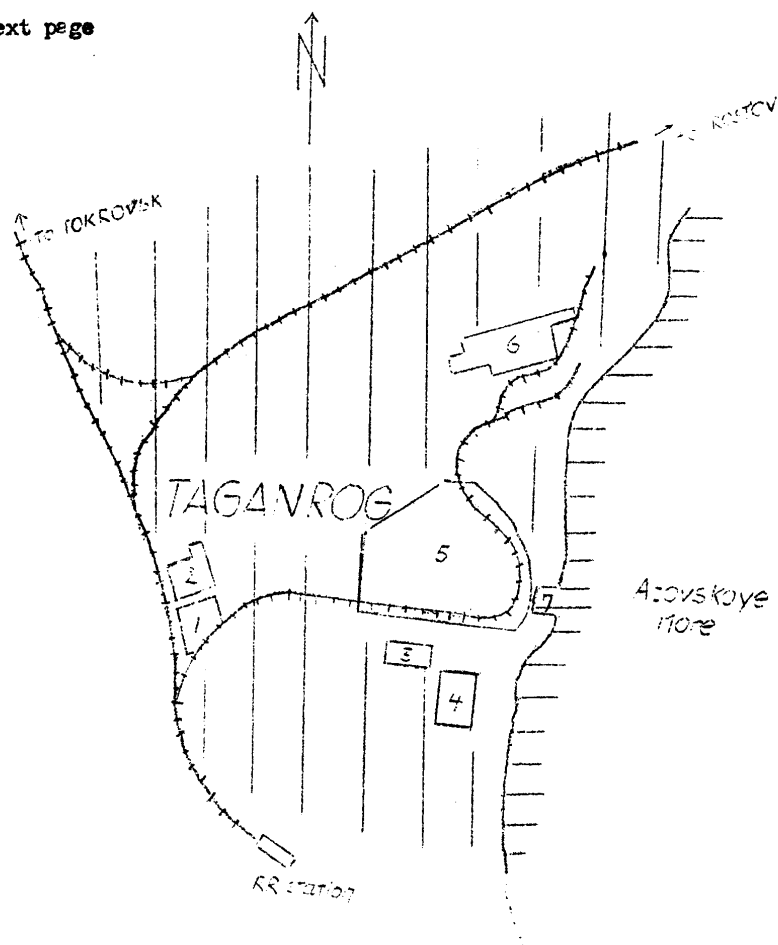
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Annex 1

- 1 -

25X1

Legend: See next page



Scale 1:37,000

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Annex 1

- 2 -

25X1

Location Sketch.

Legend:

- 1 - "Kressni Kotyolshchik" Boiler Plant
- 2 - "Molotov" Machine Factory
- 3 - Erick works
- 4 - Leather factory
- 5 - "Andreyev" Metallurgical Plant
- 6 - Mannesmann tube plant
- 7 - Port

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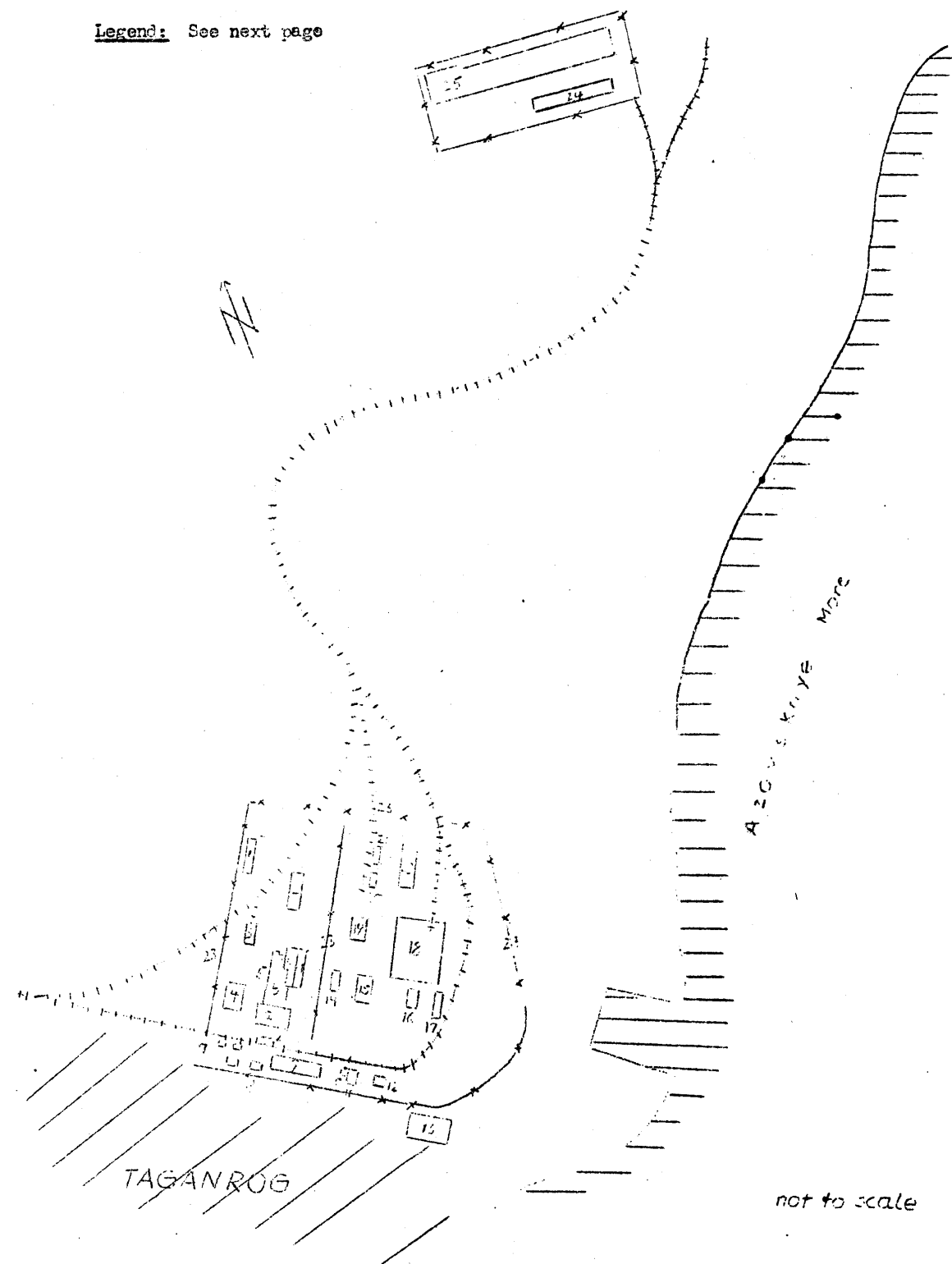
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Annex 2

- 1 -

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Legend: See next page



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Annex 2

- 2 -

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Layout Sketch.Legend:

- 1 - Main transformer station
- 2 - Repair shop for factory purposes equipped with 8 lathes, 10 milling machines, 3 or 4 punching machines, and 5 planers. About 60 percent of the machines were of German origin.
- 3 - Engine house
- 4 - Foundry
- 5 - a. Siemens Martin Plant No 1  
b. Wire Department  
c. Plate Department  
d. Sheet Department
- 6 - Main administration
- 7 - Three storage sheds
- 8 - Oil house
- 9 - Tube Plant No 1
- 10 - Small forge
- 11 - Manufacture of household utensils
- 12 - Fire brigade equipped with two motor pumps
- 13 - Oil dump
- 14 - Transformer station
- 15 - Boiler house with three or four boilers. A Siemens-Schuckert emergency generator was also available there.
- 16 - Workshop in which the material required for the repair of furnaces was manufactured.
- 17 - Repair shop
- 18 - Siemens-Martin plant No 2 equipped with three oil-burning furnaces each of which with a capacity of 120 tons, [redacted] 25X1  
[redacted] the furnaces were tapped every 8 to 10 hours. According to 25X1  
[redacted] 120 to 150 steel ingots were produced per shift; 20 percent of the output was waste. Round steel was delivered to the Mannesmann tube plant, while ingots were sent to the plate and sheet mills. In the plant there was another furnace in which an admixture used for the steel production was prepared. The admixture consisted of coke and clay.
- 19 - Manufacture of iron bedsteads
- 20 - Laths

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Annex 2

- 3 -

25X1

Layout Sketch.

Legend cont'd:

- 21 - Scrap crushing plant
- 22 - Large storage depot
- 23 - Brick wall
- 24 - Tube plant No 2, allegedly equipped with machinery of the firm of Meer A.G. at Gledbach Eneydt (3f/08). This tube mill manufactured tubes of small diameter.
- 25 - Mannesmann tube plant.

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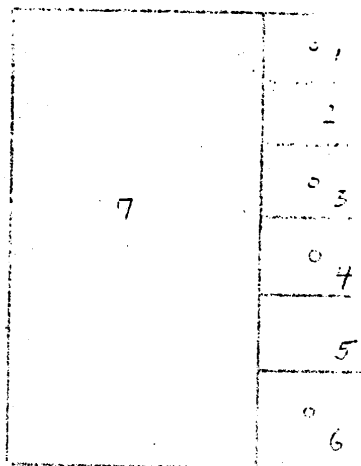
Annex 3

- 1 -

25X1

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Legend: See next page



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Annex 3

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Layout of the Foundry.

Legend:

- 1 - Electric furnace for the casting of cog wheels and other transmission units
- 2 - Foundry
- 3 - Electric furnace for the casting of machinery components from non-ferrous metals
- 4 - Gas-fired furnace for the casting of steel parts
- 5 - Office
- 6 - Gas-fired furnace for the casting of bolts, sleeves, and other small iron parts
- 7 - large hall where cylindrical and conical steel parts were manufactured. A total of 32 tons of castings were manufactured daily.

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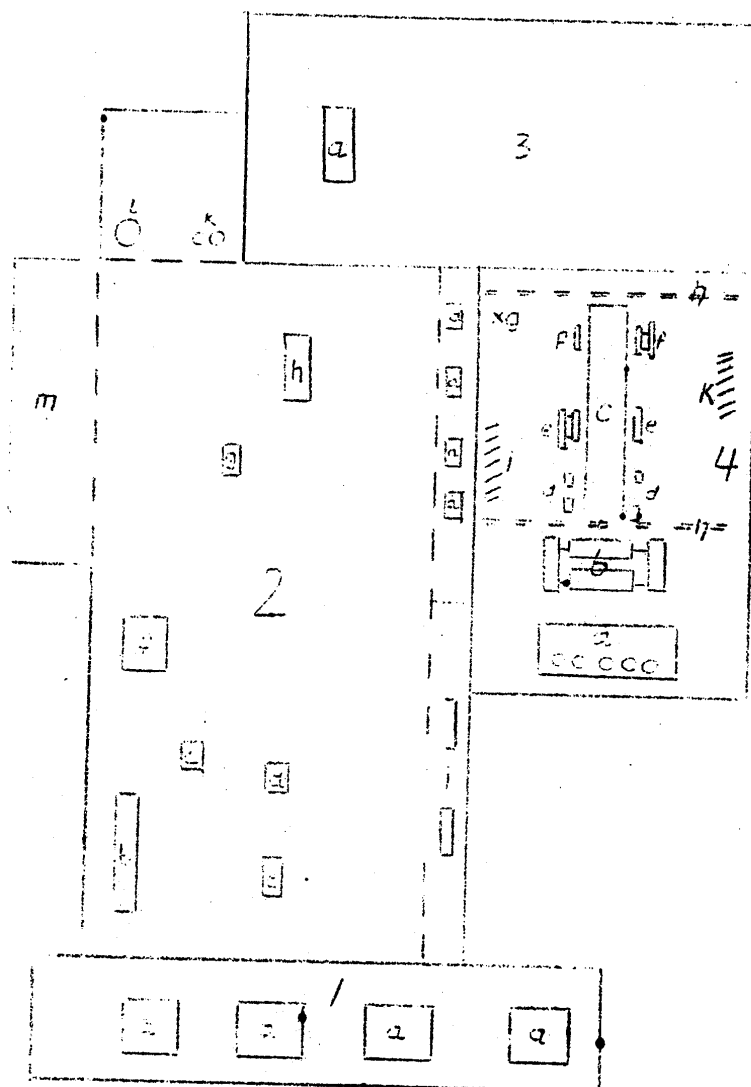
Annex 4

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Layout of Sigsbee - Martin Plan No. 1

Legend: See next page



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Annex 4

- 2 -

25X1

Layout of Siemens-Martin Plant No 1Legend:

- 1 - Siemens-Martin plant no 1 equipped with four small open-hearth furnaces (designated "a" in sketch), two of them coke-fired, the remainder oil-fired. One or two of the furnaces were out of operation at any given time. The furnaces were tapped every 8 to 10 hours. One charge of the furnaces was, allegedly, adequate for the production of 30 to 50 ingots 3 meters long and 15 to 30 centimeters in diameter.
- 2 - Tire department
  - a. Four circular saws used for the cutting of round steel
  - b. Large oil-fired annealing furnace
  - c. Hydraulic four-column press for the punching of core
  - d. Hydraulic hammer for rough forging
  - e. Small annealing furnace
  - f. Large hydraulic press for tires
  - g. Hydraulic press used for the finishing of tires
  - h. Annealing furnace with a capacity of about 400 tires
  - i. Two large transformer plants
  - k. Two basins for cooling water used for annealing purposes
  - l. New annealing furnace, constructed in late 1949 but not yet in use
  - m. Storage of finished tires

Round still furnished in sections 3 meters long was cut into disks 20 to 25 centimeters thick. Forty of these disks were heated to a temperature of 1,600°C in one annealing furnace. From there the disks were taken by grabs to the hydraulic press where the core was punched out. The cores were returned to the Siemens-Martin plant for remelting. The resulting rings were worked on with a hydraulic hammer and thereupon heated to a temperature of 1,000°C in a small oil-fired annealing furnace. Subsequently, they were brought to the required width on a hydraulic press. On another press they were repressed to an accuracy of one-tenth mm, annealed again and then cooled in the cooling basin. In early 1948, 200 tires for railroad cars were manufactured per shift; by late 1949, this production increased from 320 to 350 tires per shift. Production was frequently interrupted because of damages on over-aged machinery.

3. Plate mill equipped with one train of rollers (Walzbank) (marked "a" on sketch) and five annealing furnaces. In late 1949, 80 to 100 plates 30 mm thick were manufactured.

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Annex 4

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Layout of Siemens-Martin Plant No 1

Legend cont'd from page 2:

- 4 - Sheet mill equipped with one train of rollers, five annealing furnaces, one assembly line, and three shears.
- a Annealing furnace with five fire places and five filling holes
  - b Train of rollers through which the ingots passed several times in opposite directions
  - c Assembly line moved by cog wheels
  - d Shear No 1 mounted over the assembly line
  - e Shear No 2 mounted on the side of the assembly line
  - f Shear No 3. After passing this shear, which was installed in July 1947, the finished sheets were tested, stamped, and piled up.
  - g Crane
  - h Two ceiling grabs
  - i Storage of sheets
  - k Storage of waste

In late 1949, up to 200 sheets were manufactured at this plant in every shift. However, the production frequently broke down because of failures in the over-aged machinery.

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Annex 5

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Sketch No 1.Legend:

- 1 - Small annealing furnace for the pre-treatment of tubes of small caliber. A tube bending machine was attached to the furnace.
- 2 - Two large annealing furnaces for the treatment of sheets for large-caliber tubes. These furnaces had a capacity of up to 30 sheets per charge. A tube bending machine was attached to each furnace.
- 3 - Lathes shop equipped with eight lathes, [redacted] with thread-cutters. After the completion of turning operations the tightness of the tubes was tested under water pressure. From 10 to 15 percent of the output were waste.
- 4 - Storage of tubes

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Sketch No 2.

Layout of the Mannesmann tube plant.

Legend:

- 1 - Large oil-fired annealing furnace with two filling holes in which round steel sections were heated to temperatures of 1,600° C.
- 2 - Four drawing benches
- 3 - Small annealing furnaces
- 4 - Lathes department, respectively thread-cutting department equipped with 30 lathes and 10 thread-cutters. In the same shop the tubes were also fitted with sleeves.
- 5 - Two ceiling cranes. In late 1949, 300 tubes were manufactured within a 24-hour period. About 10 percent of the output was waste.

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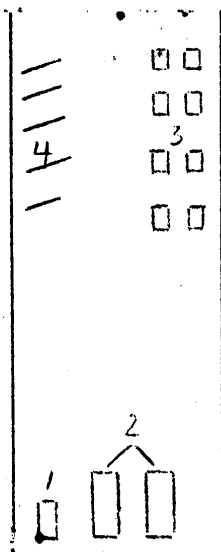
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Annex 5  
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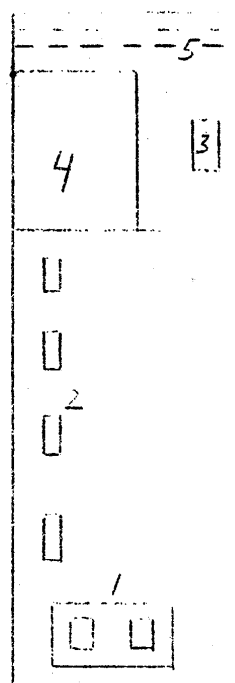
Tube Plans No. 1 & 6

Legend: See next page



not to scale

Minimum Tube  
Plan



not to scale

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CENTRAL INTELLIGENCE AGENCY

**INFORMATION REPORT**REPORT 

CD NO.

25X1

COUNTRY

USSR (Rostov Oblast)

DATE DISTR.

6 May 1955

SUBJECT

Taganrog Metallurgical Plant i/n Andreyev

NO. OF PAGES

~~14~~ 15PLACE  
ACQUIREDNO. OF ENCLS.  
(LISTED BELOW)

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DATE OF  
INFO.SUPPLEMENT TO  
REPORT NO.

25X1

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EVALUATION  PLACE OBTAINED 

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DATE OF CONTENT DATE OBTAINED  DATE PREPARED 26 May 1954REFERENCES PAGES 2 ENCLOSURES (NO. & TYPE) 5 - sketches on ditto with legendsREMARKS This is UNEVALUATED Information

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1. The "Andreyev" Metallurgical Plant (Taganrogskiy Metallurgicheskiy Savod im. Andreyeva) was located on the northeastern perimeter of Taganrog (47°14'N lat/38°57'E long), immediately by the Sea of Azov. About 1.5 km north of the plant there was a Mannesmann tube plant and another tube plant which both belonged to the "Andreyev" enterprise. The "Andreyev" Metallurgical Plant was connected with the main railroad line, and many tracks served the factory area. About 10 factory-owned locomotives were available for factory purposes, in particular for the shipment of materials from the steel department of the plant to the tube plant in the north. A streetcar stop was in the vicinity of the factory area.<sup>1</sup>
2.  the plant was founded by Belgians in 1907. Between 1935 and 1939, Germans erected the second Siemens-Martin plant, Tube Plant No 2, and the Mannesmann Tube Plant. During World War II, the plant suffered only minor damages. It was, therefore, possible to resume production at the enterprise prior to the end of the war. No construction work was observed prior to early 1950. Only some of the departments of the enterprise were equipped with new machines. 25X1
3. The factory area was approximately 450,000 square meters, of which about 300,000 square meters were accounted for by the main factory. About half of this area was built up. The enterprise included two Siemens-Martin departments, one foundry, one tire department, two sheet mills, two plants for the manufacture of welded tubes, and one Mannesmann tube plant. Power was supplied by the municipal power plant and transformed at the factory. An emergency power generator was also available.  still in early 1950 the electric current supplied frequently broke down.<sup>2</sup> 25X1
4. Commodities produced at the plant included:
  - a. Plates,  armor plates, 10 x 30 mm thick. 25X1  
In late 1949, 80 to 100 plates 10 x 25 mm thick or 40 to 50 plates 30 mm thick were manufactured per shift. It is not clear whether rolling operations were done in all of the three shifts.  25X1

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- b. Sheets from 1 to 10 mm thick. In late 1949, 300 sheets were manufactured per shift. Data on their dimensions are not available. Likewise no information is available whether rolling operations were done in all of the three shifts.

of late 1949, 70 to 80 tons of rolled products were manufactured in the two sheet mills in addition to 5 to 10 tons of waste. The sheets were delivered to the tube plants for further processing.

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- c. Tires for locomotives, railroad cars, and streetcars. Two sizes of tires were manufactured, one had a diameter of 90 cm and a weight of 320 kg, the other a diameter of 70 cm and a weight of 260 kg (sic). In late 1949, 320 to 350 tires for locomotives and railroad cars or 500 tires for streetcars were manufactured per shift. However, 20 percent of the output was waste.

- d. Welded tubes, for water pipes. The pipes were manufactured in sections 8 to 10 meters long and had diameters from 0.25 to 6". in late 1949, 2,000 tubes of all dimensions were completed within a 24-hour period.

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- e. Mannesmann tubing as used by the petroleum industry. The tubes were 15 to 20 meters long and, allegedly, had diameters ranging from 7 to 100 cm. In late 1949, 300 tubes were, allegedly, completed within 24 hours. About 10 percent of the output was waste. The steel required for the plates, sheets, tires, and tubes, was delivered by the two Siemens-Martin plants. No incoming steel deliveries were observed. On the other side,

steel was furnished to other factories in Taganrog, including the "Stalin" machine factory in the southwestern portion of the town. Sheets were furnished to a boiler factory in the northwestern portion of the city. The pig iron required by the steel foundry was furnished from Dnepropetrovsk (48°27'N lat/34°59'E long) and Stalino (48°00'N lat/37°48' E long), the coal by mines in the Donbas area.

25X1

5. the work force of the plant totaled approximately 10,000 men, the percentage of women employed in the different departments ranging from 33 to 50 percent. Work was done in three shifts. stated that one Astakhov (fnu), was general manager of the plant; mentioned one Tomoravskiy as assistant director, mentioned one Ackermann (fnu) as one of the directors of the enterprise. The factory area was surrounded by a brick wall about 3 meters high and was guarded by armed factory police.

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1. Comment. For location of metallurgical plant, see Annex 1, which is based on concordant information

UNCODED; course of the streetcar line could not be determined; the line has therefore, not been entered on the sketch.

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2. Comment. For layout of the metallurgical plant, see Annex 2; of the foundry, see Annex 3; for layout of the sheet mill and tire plant, see Annex 4; of tube plants 1 and 6, see Annex 5.

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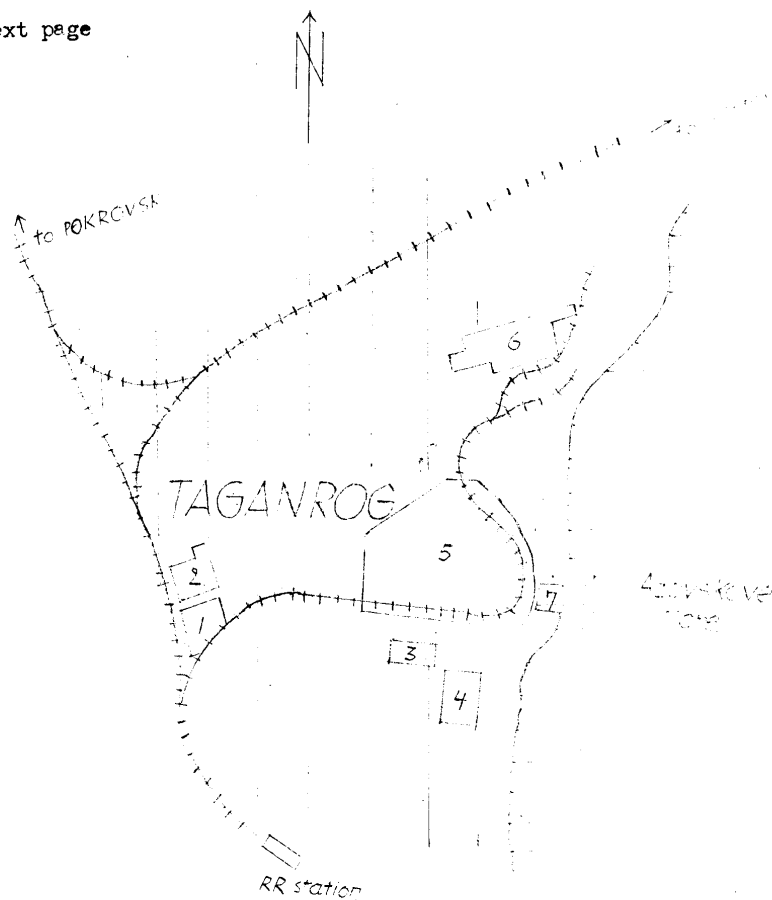
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Annex 1

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Legend: See next page



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CONFIDENTIAL, [REDACTED]

Annex 1 [REDACTED]

- 2 -

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Location Sketch.

Legend:

- 1 - "Krassni Kotyolshchik" Boiler Plant
- 2 - "Molotov" Machine Factory
- 3 - Brick works
- 4 - Leather factory
- 5 - "Andreyev" Metallurgical Plant
- 6 - Mennesmann tube plant
- 7 - Port

CONFIDENTIAL, [REDACTED]

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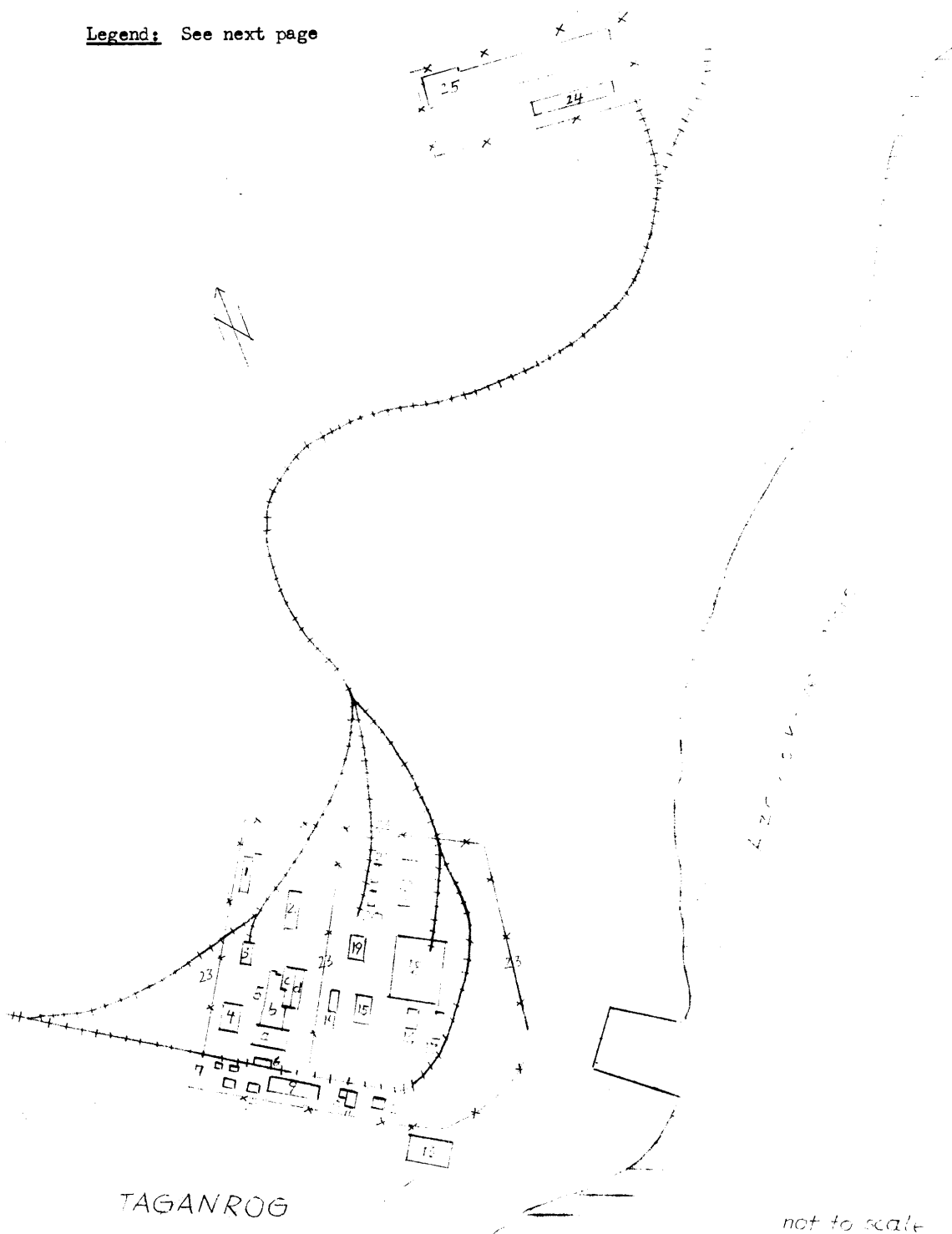
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Annex 2

- 1 -

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Legend: See next page



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Annex 2

- 2 -

Layout Sketch.Legend:

- 1 - Main transformer station
- 2 - Repair shop for factory purposes equipped with 20 lathes, 10 milling machines, 3 or 4 punching machines, and 5 planers. About 60 percent of the machines were of German origin.
- 3 - Engine house
- 4 - Foundry
- 5 - a. Siemens Martin Plant No 1
  - b. Tire Department
  - c. Plate Department
  - d. Sheet Department
- 6 - Main administration
- 7 - Three storage sheds
- 8 - Club house
- 9 - Tube Plant No 1
- 10 - Small forge
- 11 - Manufacture of household utensils
- 12 - Fire brigade equipped with two motor pumps
- 13 - Oil dump
- 14 - Transformer station
- 15 - Boiler house with three or four boilers. A Siemens-Schuckert emergency generator was also available there.
- 16 - Workshop in which the material required for the repair of furnaces was manufactured.
- 17 - Repair shop
- 18 - Siemens-Martin plant No 2 equipped with three oil-burning furnaces each of which with a capacity of 120 tons, 25X1  
25X1 the furnaces were tapped every 8 to 10 hours. According to 120 to 150 steel ingots were produced per shift; 20 percent of the output was waste. Round steel was delivered to the Mannesmann tube plant, while ingots were sent to the plate and sheet mills. In the plant there was another furnace in which an admixture used for the steel production was prepared. The admixture consisted of coke and clay.
- 19 - Manufacture of iron bedsteads
- 20 - Paths

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Annex 2

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Layout Sketch.

Legend cont'd:

- 21 - Scrap crushing plant
- 22 - Large storage depot
- 23 - Brick wall
- 24 - Tube plant No 2, allegedly equipped with machinery of the firm of Meer A.G. at Gladbach Rheydt (3f/08). This tube mill manufactured tubes of small diameter.
- 25 - Mannesmann tube plant.

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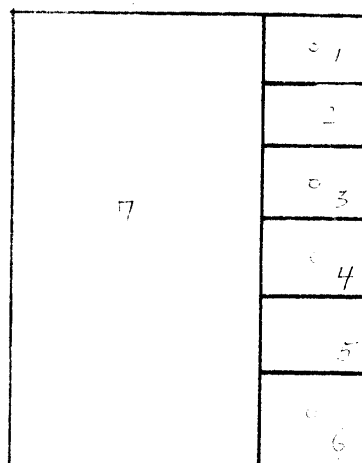
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Annex 3  
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Legend: See next page



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Annex 3

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Layout of the Foundry.

Legend:

- 1 - Electric furnace for the casting of cog wheels and other transmission units
- 2 - Foundry
- 3 - Electric furnace for the casting of machinery components from non-ferrous metals
- 4 - Gas-fired furnace for the casting of steel parts
- 5 - Office
- 6 - Gas-fired furnace for the casting of bolts, sleeves, and other small iron parts
- 7 - Large hall where cylindrical and conical steel parts were manufactured. A total of 32 tons of castings were manufactured daily.

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Layout of Siemens - Martin Plan No. 1

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not to be able

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Annex 4

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Layout of Siemens-Martin Plant No 1Legend:

- 1 - Siemens-Martin plant no 1 equipped with four small open-hearth furnaces (designated "a" in sketch), two of them coke-fired, the remainder oil-fired. One or two of the furnaces were out of operation at any given time. The furnaces were tapped every 8 to 10 hours. One charge of the furnaces was, allegedly, adequate for the production of 30 to 50 ingots 3 meters long and 15 to 30 centimeters in diameter.
- 2 - Tire department
  - a. Four circular saws used for the cutting of round steel
  - b. Large oil-fired annealing furnace
  - c. Hydraulic four-column press for the punching of core
  - d. Hydraulic hammer for rough forging
  - e. Small annealing furnace
  - f. Large hydraulic press for tires
  - g. Hydraulic press used for the finishing of tires
  - h. Annealing furnace with a capacity of about 400 tires
  - i. Two large transformer plants
  - k. Two basins for cooling water used for annealing purposes
  - l. New annealing furnace, constructed in late 1949 but not yet in use
  - m. Storage of finished tires

Round still furnished in sections 3 meters long was cut into disks 20 to 25 centimeters thick. Forty of these disks were heated to a temperature of 1,600°C in one annealing furnace. From there the disks were taken by grabs to the hydraulic press where the core was punched out. The cores were returned to the Siemens-Martin plant for remelting. The resulting rings were worked on with a hydraulic hammer and thereupon heated to a temperature of 1,000°C in a small oil-fired annealing furnace. Subsequently, they were brought to the required width on a hydraulic press. On another press they were repressed to an accuracy of one-tenth mm, annealed again and then cooled in the cooling basin. In early 1948, 200 tires for railroad cars were manufactured per shift; by late 1949, this production increased from 320 to 350 tires per shift. Production was frequently interrupted because of damages on over-aged machinery.

3. Plate mill equipped with one train of rollers (Walzbank) (marked "a" on sketch) and five annealing furnaces. In late 1949, 80 to 100 plates 30 mm thick were manufactured.

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Annex 4

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Layout of Siemens-Martin Plant No 1

Legend cont'd from page 2:

- 4 - Sheet mill equipped with one train of rollers, five annealing furnaces, one assembly line, and three shears.
  - a Annealing furnace with five fire places and five filling holes
  - b Train of rollers through which the ingots passed several times in opposite directions
  - c Assembly line moved by cog wheels
  - d Shear No 1 mounted over the assembly line
  - e Shear No 2 mounted on the side of the assembly line
  - f Shear No 3. After passing this shear, which was installed in July 1947, the finished sheets were tested, stamped, and piled up.
  - g Crane
  - h Two ceiling grabs
  - i Storage of sheets
  - k Storage of waste

In late 1949, up to 300 sheets were manufactured at this plant in every shift. However, the production frequently broke down because of failures in the over-aged machinery.

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Annex 5

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Sketch No 1.

Legend:

- 1 - Small annealing furnace for the pre-treatment of tubes of small caliber. A tube bending machine was attached to the furnace.
- 2 - Two large annealing furnaces for the treatment of sheets for large-caliber tubes. These furnaces had a capacity of up to 30 sheets per charge. A tube bending machine was attached to each furnace.
- 3 - Lathe shop equipped with eight lathes, [redacted] with thread-cutters. After the completion of turning operations the tightness of the tubes was tested under water pressure. From 10 to 15 percent of the output were waste.
- 4 - Storage of tubes

25X1

Sketch No 2.

Layout of the Mannesmann tube plant.

Legend:

- 1 - Large oil-fired annealing furnace with two filling holes in which round steel sections were heated to temperatures of 1,600° C.
- 2 - Four drawing benches
- 3 - Small annealing furnaces
- 4 - Lathe department, respectively thread-cutting department equipped with 30 lathes and 10 thread-cutters. In the same shop the tubes were also fitted with sleeves.
- 5 - Two ceiling grabs. In late 1949, 300 tubes were manufactured within a 24-hour period. About 10 percent of the output was waste.

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25X1

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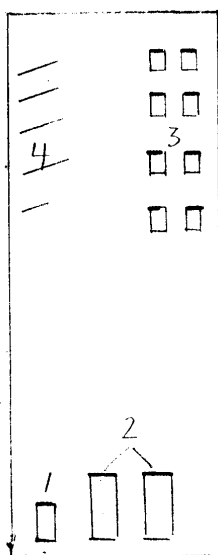
25X1

Annex 5

- 1 -

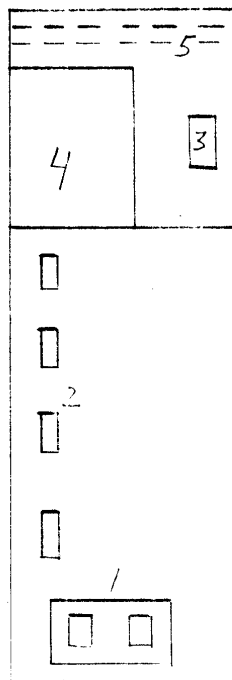
Tube Plants No. 1 & 6

Legend: See next page



*not to scale*

Mannesmann Tube  
Plant



*not to scale*

CONFIDENTIAL

25X1